

Amendments to the Specification:

Please replace the table beginning at page 8, line 4 with the following new table:

Table I: Some mutated human hemoglobins
(Int. Hemoglobin Center, 1995)

Abnormal hemoglobin	Normal residues and positions	Replacement
α chain (SEQ ID NO: 31)		
I	16 Lys	Glu
G _{Honolulu}	30 Glu	Gln
Norfolk	57 Gly	Asp
M _{Boston}	58 His	Tyr
G _{Philadelphia}	68 Asn	Lys
O _{Indonesia}	116 Glu	Lys
β chain (SEQ ID NO: 33)		
C	6 Glu	Lys
S	6 Glu	Val
G _{San José}	7 Glu	Gly
E	26 Glu	Lys
M _{Saskatoon}	63 His	Tyr
Zurich	63 His	Arg
M _{Milwaukee}	67 Val	Glu
D _{Punjab}	121 Glu	Gln
Mequon	41 Phe	Tyr
Providence	82 Lys	Asp

Please replace the paragraph beginning at page 31, line 25 with the following new paragraph:

To obtain mitochondrial targeting, the sequence encoding the transit peptide of the Nicotiana plumbaginifolia mitochondrial ATPase-F1 β subunit precursor (ATG GCT TCT CGG AGG CTT CTC GCC TCT CTC CTC CGT CAA TCG GCT CAA CGT GGC GGC GGT CTA ATT TCC CGA TCG TTA GGA AAC TCC ATC CCT AAA TCC GCT TCA CGC GCC TCT TCA CGC GCA TCC CCT AAG GGA TTC CTC TTA AAC CGC GCC GTA CAG TAC; SEQ ID NO: 9) is fused with the first codon of the sequence encoding, on the one hand, the mature α globin chain (deletion of the initiator ATG) and, on the other hand, the mature β globin chain (deletion of the initiator ATG) while maintaining the open reading frames.